

Moreover the œsophagus is not formed as an invagination from the anterior extremity of the intestinal fold, but as a *paul-like epithelial growth along the lower border of the dorsal fold in the branchial space*, which, being afterwards constricted off at its base by the surrounding connective tissue, becomes a solid cellular cord running in the depths of the fold. The starting-point of the whole new formation is certainly the spot at the end of the branchial space where the entrance to the stomach is closed by the thickening of the lips surrounding it.—*Zool. Anzeiger*, January 13, 1890, p. 11.

The Amphipoda of the Boulonnais.—I. *Unciola crenatipalmata*,
Spence Bate. By M. JULES BONNIER.

In this paper, which is illustrated by two plates, the author gives a detailed description of the Amphipod Crustacean first described by Gosse as identical with the *Unciola irrorata* of Say, and afterwards recognized as distinct by Spence Bate and described by him under the name of *Dryope crenatipalmata*. The author discusses at some length the characters presented by the species, and gives the following series of tables to serve for its identification :—

I. AMPHIPODA.

Pleon well developed.	{ Six pairs of pleopods.	{ Maxilliped well developed.	Maxilliped rudimentary	HYPERINA.
			Sixth pleopod with an endopodite	GAMMARINA.
			Sixth pleopod with no endopodite	COROPHINA.
			Fifth and sixth pleopods without endopodites	CERAPINA.
Pleon rudimentary	{ Five pairs of pleopods		DULICHIINA.	
			LEMODIPODA.	

II. COROPHINA.

Mandibular palpus wanting	ORCHIESTIDÆ.		
Mandibular palpus of two or three joints.	{ Coxopodites of the pereiopods broadly developed.	{ Joints 2 and 3 of the maxilliped narrow.	STENOTHOIDÆ.
		{ Joints 2 and 3 of the maxilliped lamellar	MICROPROTOPIDÆ.
		{ Coxopodites of the pereiopods narrow and not well developed	COROPHIDÆ.

III. COROPHIIDÆ.

Corophiidae.	Mandibular palpus of 2 joints			<i>Corophium</i> .
		Mandibular palpus of 3 joints; last 3 segments of pleon	free; basipodite of sixth pleopod	dilated; mandibular palpus with joint 3
nodiform <i>Siphonæcet</i> .				
narrow; first pereopod	less developed than the second. <i>Erichthoni</i>			
	more developed than the second. <i>Neobela</i> .			
		coalescent <i>Chelura</i> .		

IV. UNCIOLA.

Joints 2, 3, and 4 of the inferior antennæ	narrow; third joint of antennule	two thirds length of second; margin of propodite of second pereopod	crenulated <i>U. crenatipalmata</i>
			simple <i>U. irrorata</i> .
	broad; infero-posterior part of fourth joint with the margin	one third length of second; accessory flagellum of antennule	of a single joint. <i>U. planipes</i> .
			pluriarticulate. <i>U. crassipes</i> .
		produced into a point <i>U. petalocera</i> .	
		broadly rounded <i>U. laticornis</i> .	

The genus *Unciola* was established by Say in 1818, and adopted by Milne-Edwards and other authors. Synonyms are *Dryope*, Sp. Bate, *Glauconome*, p. Kröyer, and *Cyrtophium*, p. Danielssen.

The species referred to the genus, as seen in the above table, are:—1. *Unciola crenatipalmata*, Sp. Bate (= *irrorata*, Gosse, nec Say), of the seas of western Europe; 2. *U. irrorata*, Say (= *Glauconome leucopsis*, Kröyer, and *Cyrtophium Darwinii*, Danielssen), from the Arctic seas and those of Britain and Norway; 3. *U. planipes*, Norman (= *leucopes*, Sp. Bate and Westw., *Glauconome Kroeyeri* and *Steenstrupii*, Boeck), from the shores of Greenland, Norway, England, and France; 4. *U. petalocera*, G. O. Sars, from the Arctic Ocean; 5. *U. crassipes*, Hansen, from the west coast of Greenland; and 6. *U. laticornis*, Hansen, from the same region.—*Bull. Scient.* tome xx. 1889, pp. 229-254.